

heal more quickly than those of the lower, and, in either, the time required for cure depends considerably upon the thickness of the parts at which the operation is performed.

That portion of Mr. Sansom's pamphlet treating of the causes of death after amputation is based upon the results given in a table calculated from the cases recorded in the London hospitals from January, 1856, to June, 1857. His conclusion is that the two most common causes of death after amputation are shock and exhaustion, and pyæmia, "that the former is now-a-days the most frequent, being twice as frequent as the latter." Here again it must be said that the data furnished are altogether insufficient for arriving at any correct general conclusion, such as is implied by the expression *now-a-days*. Statistical tables of much greater extent go to show that phlebitis and purulent absorption occur in the majority of the cases of amputation terminating fatally. The two causes of death in amputations mentioned by Celsus are *profusio sanguinis* and *defectio animæ*; modern surgery, by the use of the ligature, contends successfully with the former danger, but nervous shock is as much to be dreaded as ever, and we despair before pyæmia, a danger in ancient times entirely unknown.

Speaking of Celsus leads us to endeavour to rectify what we believe to be an erroneous statement in regard to him, made by Mr. Sansom in a historical resumé of the most special circumstances affecting the increase or decrease of the rate of mortality after amputation. He says that "it was not until Celsus that there was any improvement; he extended slightly the list of circumstances under which the operation should be undertaken, and he distinctly specifies in his work a method of arresting hemorrhage by ligatures on the bleeding artery." Now the fact is that Celsus does not speak of amputation anywhere but in the 39th section of the VIIth book, and the only cases in which he advises it are in certain cases of gangrene of the extremities. As to ligaturing the arteries in amputations, he certainly never thought of such a proceeding. Bleeding should be arrested, according to him, by sponges with vinegar and water, and applications of a similar character. He adds, moreover, *cetera postea sic facienda, ut in vulnribus, in quibus pus moveri debet, præceptum est*. Now in the place thus referred to nothing is said of ligaturing bleeding vessels. The only place where Celsus speaks of tying a bloodvessel is where he speaks of *curable wounds*, and then he states that in obstinate bleeding from an incised wound two ligatures may be tied on the *vein*, which should afterwards be divided between them. (Lib. V. Sect. xxvi. § 21.) This point is, indeed, not one of much importance, but it possesses considerable interest in a historical point of view.

In what we have taken occasion to say of this little publication, we hope that we may not be misunderstood when objecting to some of the tables therein contained as being insufficient. Though we must hold them to be not sufficiently extensive to warrant general conclusions to be made therefrom, yet we must heartily thank the author for their preparation, and for having presented them to the medical public. Such publications as his are most welcome to those engaged in investigating one of the most important points in surgery, the dangers of amputations, and the best means of contending with them. W. F. A.

ART. XXX.—*Urinary Deposits; their Diagnosis, Pathology, and Therapeutical Indications*. By GOLDING BIRD, M. D., F. R. S. Edited by EDMUND LLOYD BIRKETT, M. D., etc. etc. A new American from the fifth London edition. With eighty illustrations on wood. 8vo. pp. 382. Philadelphia: Blanchard & Lea.

VERY few works are better known to the medical profession than that of which the fifth edition is now before us; very few have established for their

¹ The edition we have referred to is that of Leonard Targa, Leyden, 1785, admitted to be the best ever published.

authors a more solid claim to a place among the *emeriti*. Dr. Bird's memory will ever be honoured as that of an earnest, intelligent, and successful labourer in a most important field.

The duty of preparing this posthumous edition of a work so valuable to the student and practitioner of medicine has been well performed by Dr. Birkett. We have, of course, here to call attention only to the modifications he has made, and of these we can only allude to the most important. They are partly incorporated in the text, and partly arranged in the form of foot-notes.

In the first three chapters, on the chemistry and physiology of the urine, we find some new matter of moment. The description of two acids discovered in the urine by Dr. Marcet, published by him in 1853, is quoted in full, with its accompanying wood-cut. The processes recommended by Liebig, Lehmann, and Davy, for obtaining and estimating the amount of urea, are detailed; as well as that of Lehmann for determining the quantity of chlorine, and that of Bensch for determining the amount of uric acid.

The tables in § 26, for the chemical and microscopical examination of urinary deposits, have been rendered much simpler and more convenient, and to a slight extent enlarged.

On page 61, a paragraph is inserted on the subject of the new views entertained by chemists with regard to the organic radicals. A more extended exposition of this important change in theory would have been by no means out of place here, while it would have proved very valuable to the less proficient reader.

Dr. Bird, in the previous editions of this work, expressed the opinion that the principal salt of uric acid, obtained from healthy urine, was that formed with ammonia. His present editor, while acknowledging the ingenuity of the theory sustaining this idea, denies its correctness; preferring the view held by Lehmann, that the salts of uric acid with soda, lime, and potash, are the important ones, while the urate of ammonia is present only in very small quantity. Five cases, observed by Drs. Hassall and Letheby, are adduced in support of this preference, which is in accordance with the views expressed by Simon in his "Chemistry of Man," and with those set forth in the recently published work of Thudichum on "The Pathology of the Urine."

In a note appended to Chapter IX., on oxaluria, the views of Lehmann, Scherer and others as to the non-existence of an oxalic acid diathesis are stated, and the arguments in favour of its occurrence are concisely summed up. Such a diathesis exists, in the opinion of Dr. Bird and his editor, and we believe the profession in this country are disposed to agree with them upon this point.

In the chapter on the phosphates, the statements of Robin and Verdeil in regard to the neutral and acid phosphates of soda are quoted, with cuts copied from their representations of the crystalline forms of those salts. Another note to this chapter awards Dr. Hassall the credit of having first described the crystals of phosphate of magnesia.

To the next chapter, on deposits of abnormal blue or black colouring matters, we find added Dr. Hassall's views in reference to the relation between indigo and hæmatin, and a notice of Dr. Hughes' cases of black urine, published in *Guy's Hospital Reports*.

We now come to the portion of the work devoted to non-crystalline organic products. And here we find, in the first place, a note on the various forms of casts, with several wood-cuts. So far as it goes, this note is very good; but it seems to us that more space might have been allotted to so very important a subject, and especially to the collocation of the clinical symptoms with the forms of casts usually associated with them.

Several notes are introduced in the section on saccharine urine. Horsley's chromate of potash test, Luton's test, and the fermentation test, are detailed. Dr. Beale's remarks on the causes of failure in the use of Trommer's test are quoted, and will be found useful to many. But the most important portion of this additional matter is that relating to the physiological and pathological origin of sugar.

And here we must express our regret that the editor has failed to award Bernard, perhaps the greatest physiologist of our day, that credit to which he is

entitled for his labours in the investigation of this subject. Dr. Pavy is made, as it were, to take the matter out of Bernard's hands.

Nor do we find ourselves much enlightened by the remarks which the editor offers as setting forth the existing aspect of the subject. We have space here to criticize, but not to attempt the much more difficult task of doing better; and we must allow that we should shrink from such an undertaking until further light is obtained.

It must be a matter of surprise that no allusion has been made in any edition of Dr. Bird's work to a paper on *Kiestein*, published by Dr. E. K. Kane, in this journal, in July, 1842. Being based on clinical observation, and written in a philosophical spirit, that paper was surely worthy of reference in our author's bibliographical table, as a companion to the article on the same subject which he put forth in 1840, in the *Guy's Hospital Reports*.

The form in which this volume now appears is a very attractive one. The page has been considerably enlarged, and the type is clearer and more agreeable than that employed in previous editions. A very few typographical errors call for correction, such as "*Donne*" for "*Donné*," "*Dichholz*" for "*Eichholz*," "*materies mortuæ*."

In conclusion, we confidently predict that the present issue of Dr. Bird's work will be received by the medical public in America with even greater favour than its predecessors.

J. H. P.

ART. XXXI.—*Gustaf von Düben's Treatise on Microscopical Diagnosis*, with 71 engravings. Translated, with additions, by Prof. LOUIS BAUER, M. D., M. R. C. S. Eng., etc. 8vo. pp. 82. New York: John Wiley, 56 Walker Street. 1859.

WHILE we entertain a very high estimate of the value of the microscope as a means of research, we look upon its use in diagnosis as mainly incidental and corroborative. Without this instrument, anatomy, physiology and pathology could never have made such advances as they have within the last twenty-five years, nor, deprived of its aid, could they progress as we confidently expect them to do in the future.

A microscopic examination may disclose the nature of a urinary deposit, or confirm a doubtful diagnosis in regard to a tumour; but it can hardly be requisite for distinguishing skin-diseases, leucocythemia, or other disorders of the blood, or affections of the viscera generally. Hence, of the seventy-six pages of reading matter comprised in the little volume before us, the first fifty-five are devoted to matters belonging rather to general pathology than to diagnosis. The book presents a compilation of facts, doubtless useful in their place, although they merit fuller discussion than its limits allow them, but not answering at all to the title selected. Nor, we must observe, is sufficient stress laid upon the diseases to be diagnosed, in that portion of the volume which deals with discharges from the uro-genital organs. It is, after all, only through the chain of phenomena leading up to the primary morbid condition, that any symptom is of value in diagnosis; to detect oxalate of lime in the urine is useless, without a knowledge of the antecedents of the deposit.

A rigid critic might take exception to numerous idiomatic expressions retained in the translation; nor are the illustrations as well-executed as we think they should have been.

J. H. P.